

#### ABSTRACT OF THE DISCLOSURE

Refining elements are disclosed for use in the refining of fibrous material in which the refining elements include a pattern of bars and intermediate grooves between the bars. The bars extend in an arc-shaped direction outwardly over the refining element and the upper surface of the bars includes smaller grooves which form angles of from about  $10^{\circ}$  to  $90^{\circ}$  with respect to the longitudinal direction of the bars so that the smaller grooves on the bars extend substantially radially.